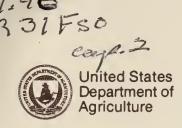
Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.



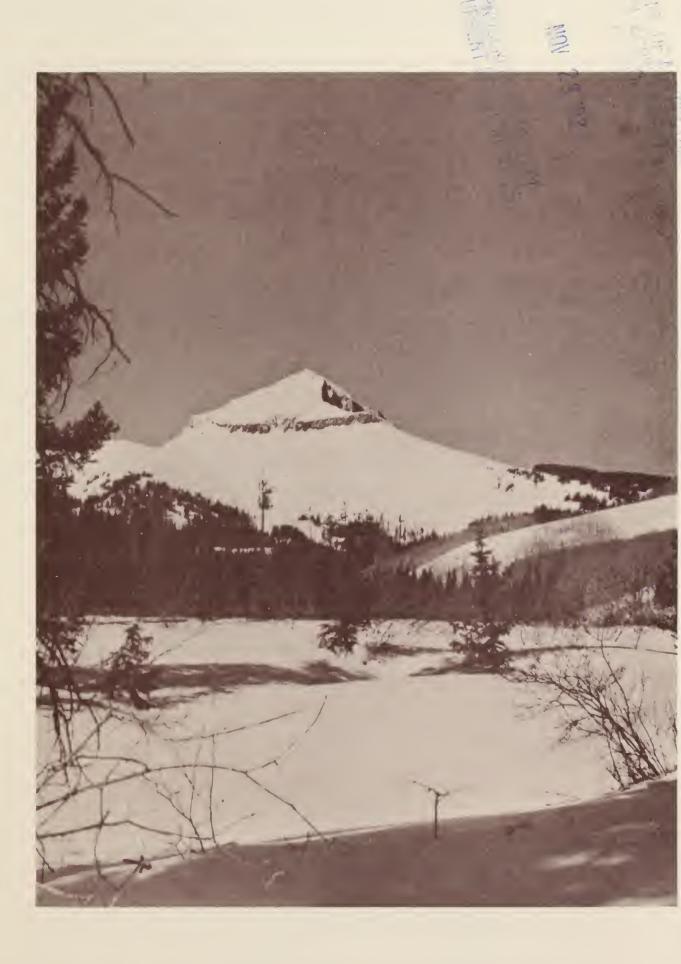


Soii Conservation Service

Portland, Oregon



Water Supply Outlook for Oregon as of MAY 1, 1982



TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: LONE CONE, NEAR NORWOOD COLORADO, BLANKETED BY ITS WINTER MANTLE OF SNOW.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 510, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE ADDRESS

Alaska Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504

Arizona Room 3008, Federal Building, 230 N. First Ave., Phoenix, Arizona 85025

Colorado (N. Mex.) P. O. Box 17107, Denver, Colorado 80217

Idaho Room 345, 304 N. 8th. St., Boise, Idaho 83702

Montana P. O. Box 98, Bozeman, Montana 59715

Nevada P. O. Box 4850, Reno, Nevada 89505

Oregon 1220 S. W. Third Ave., Portland, Oregon 97204

Utah 4420 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138

Washington 360 U. S. Court House, Spokane, Washington 99201

Wyoming P. O. Box 2440, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Snow Surveys Branch, California Department of Water Resources, P.O. Box 388, Sacramento, California 95802 --- for British Columbia by the Ministry of the Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia V8V 1X5 --- for Yukon Territory by the Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory Y1A 3V1 --- and for Alberta, Saskatchewan, and N.W.T. by the Water Survey of Canada, Inland Waters Branch, 110-12 Avenue S.W, Calgary, Alberta T3C 1A6.



☆ GPO 593-038

WATER SUPPLY OUTLOOK FOR OREGON

and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

PETER C. MYERS

Chief
SOIL CONSERVATION SERVICE
WASHINGTON. D C

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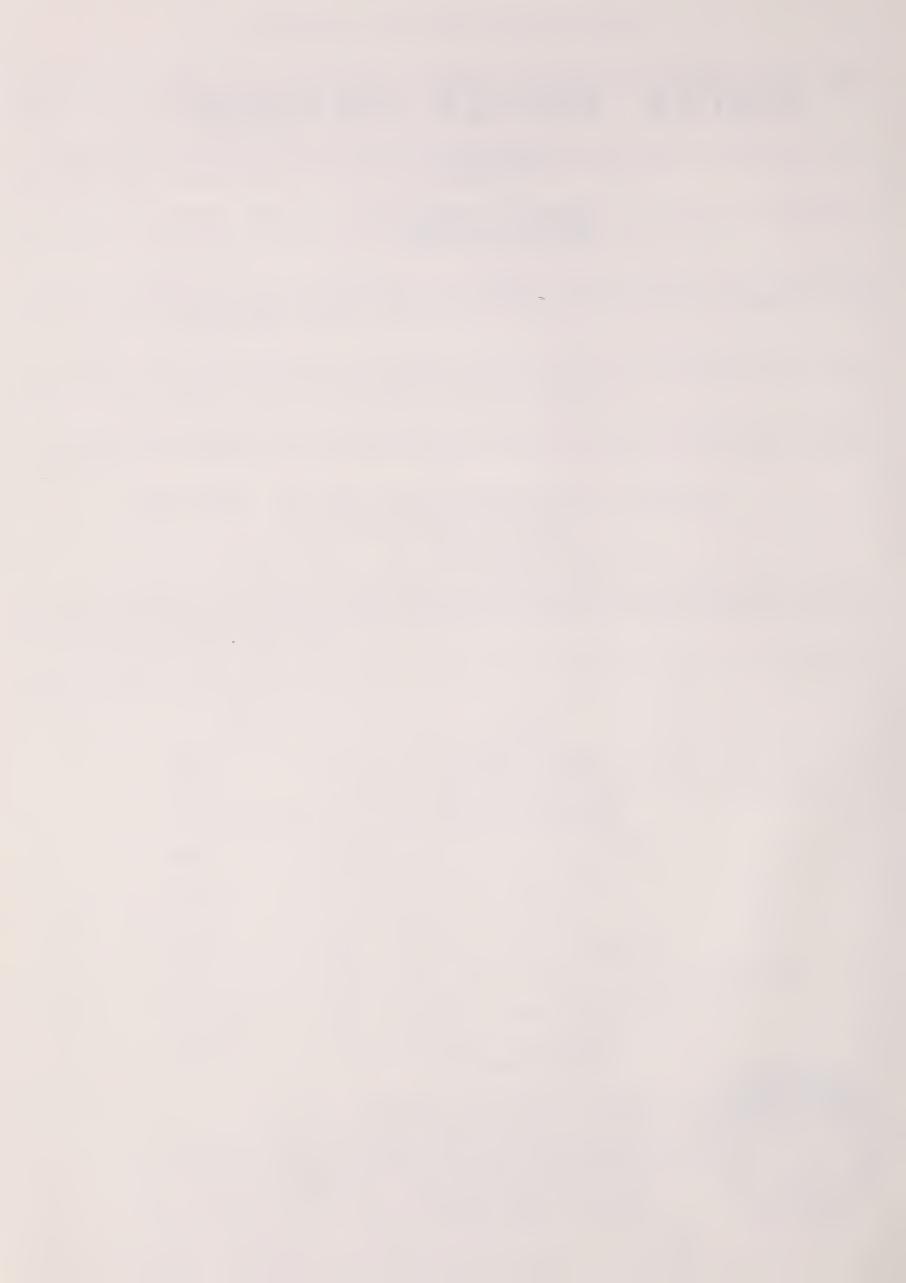
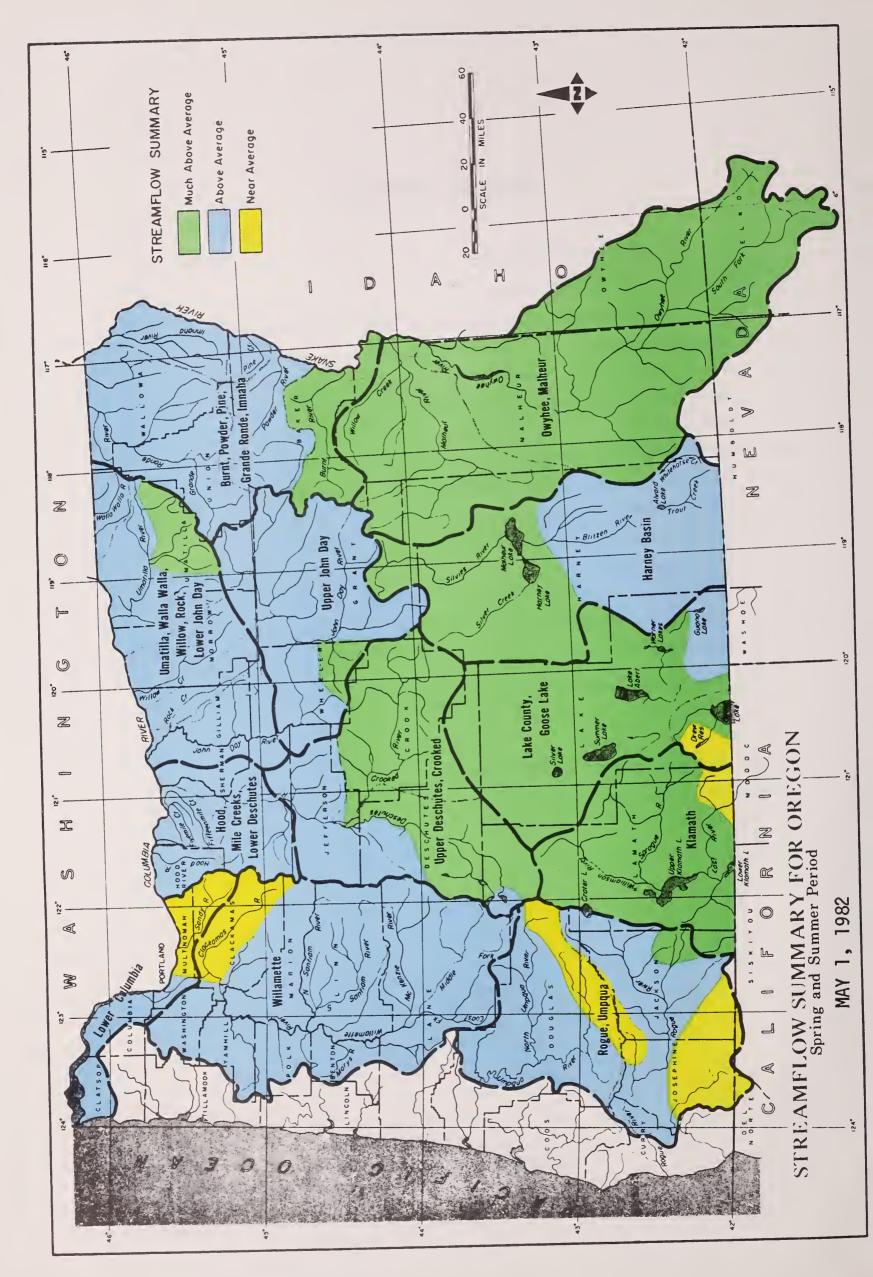


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WATER SUPPLY OUTLOOK AND SUMMARY FOR ORFGON

May 1, 1982

SNOW COVER

Over most of the state the snowpack ranges from above average to much above average. The high elevation snowmelt began two or three weeks later than normal because of the below normal temperatures. West of the Cascades it is generally above average. An exception to this is in the Santiam River area where it is much above average (132%). Snowpack is near average on the Clackamas and Row Rivers and also on Butte and Bear Creeks. East of the Cascades the snowpack is generally much above average. Exceptions to this are the Grande Ronde and Walla Walla Rivers where the snow cover is above average. A small portion of southern Klamath and Lake Counties has below average to much below average snowpacks. This has been an excellent year for snowpack.

PRECIPITATION

Precipitation was much above average in Klamath County and on the Deschutes, Crooked, Willamette, Rogue and Umpqua river basins. It ranged from 133 to 174% of normal. It was near average in Lake County and on the Owyhee, Malheur, Lower John Day and Hood River drainage basins. On the Grande Ronde, Imnaha and Upper John Day basins and in Harney County, the precipitation was below normal (80-85%). The precipitation for the November-April season has been above normal across the entire state. It ranges from 107% of normal on the Lower John Day to 181% in Lake County.

RESERVOIR STORAGE

Reservoir storage is good this year. Twenty-seven irrigation reservoirs are currently storing 2,868,200 acre feet of water. This is 89% of capacity and 109% of normal for this time of year.

STREAMFLOW

Streamflows have been above average. This is due to the excellent amounts of precipitation and the very good snowpack which we have received this year. Streamflow is forecast to be above average west of the Cascades. East of the Cascades the streamflow will be above average in the north, while in the south it will be much above average.

Forecasts of May-Sept. streamflow volumes on representative Oregon streams as a percent of average are as follows:

	FORECAST
STREAM	% OF 1963-77 AVG.
Owyhee net Inflow	160%
Malheur nr. Drewsey	168%
Deschutes @ Benham Falls	115%
Grande Ronde @ La Grande	120%
Willamette Mid. Fk. nr. Oakridge	116%
Upper Klamath Lake net Inflow	134%
Rogue @ Raygold	120%
Silvies nr. Burns	170%

These forecasts assume normal weather conditions will occur from now until the end of the forecast period. If the precipitation is much more or less than normal, streamflow will vary from what is forecast.

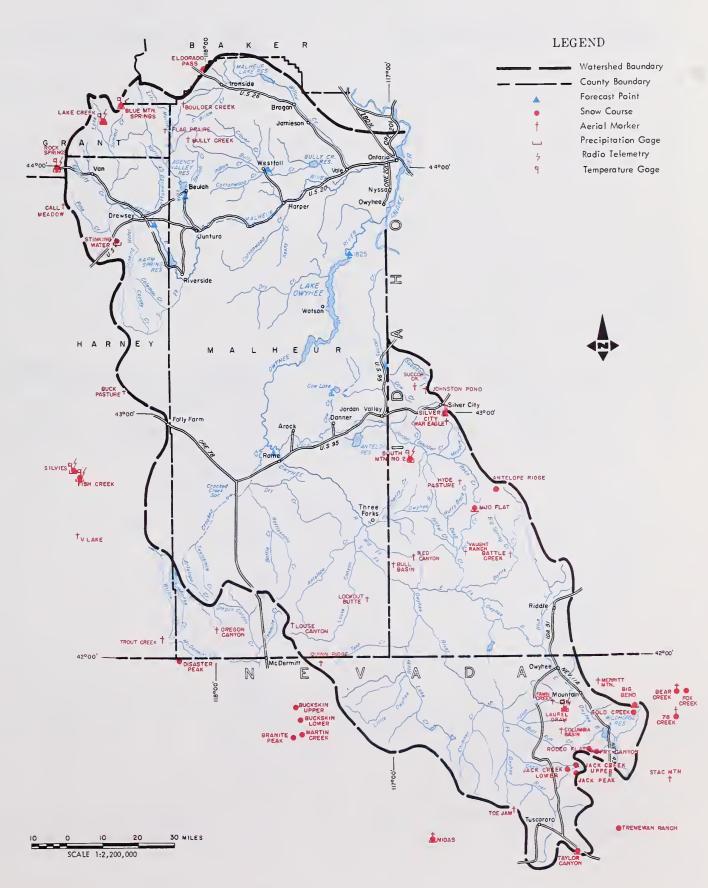
The forecasts in this bulletin are a result of coordinated activity between the Soil Conservation Service and the National Weather Service as an effort to provide the best possible service to water users.

This report contains data furnished by the Oregon Department of Water Resources, U.S. Geological Survey, NOAA National Weather Service and other cooperators.

WATER SUPPLY OUTLOOK OWYHEE, MALHEUR WATERSHEDS OREGON

GENERAL OUTLOOK

Water supplies are forecast to be excellent this summer for Malheur County. The streamflow will range from 143 to 169% of normal. April precipitation was 92% of normal and 154% for the November-April period. The snowpack in the area is the best in the state, ranging from 188% to 228% of normal. Reservoirs are full or very close to being full.



STREAMFLOW FORECASTS		THIS YEA	R	PAST	RECORD
	FORE	CAST	FORECAST	THOUSAND ACRE FEET	
BASIN, STREAM and/or FORECAST POINT	Thousand Acre Feet	Percent of Average	PERIOD	Last Year	Average C
Bully Creek at Warmsprings Malheur near Drewsey Malheur, North Fork at Beulah Owyhee Reservoir net Inflow Owyhee at Rome Succor Creek near Jordan Valley	50 60 62 66 73 316 359 323 7.3	397 167 168 169 166 160 160 160 143	March-May May-July May-Sept. May-July May-Sept. May-July May-Sept. May-July May-July		12.6b 36 37 39 44 197 224 202 b 5.1b

RESERVOIR STORAGE (Thousand Ac Ft) END OF MONTH

TOREGRO! BRIE OF LOW				MESERVUIR STURAGE (nousanu	No. IL.	END OF	MONTH
FORECAST POINT	Low Flow Value	Julean IIII	Average Date of Low Flow	RESERVOIR	Usable	U	able Stora	ge
	Second/Ft.	Recede to Low Flow Value	Value	KESEKVOIK	Capacity	This Year	Last Year	Average C
Owyhee near Rome	2000 1000 500	May 27 June 18 July 8	May 14 May 28 June 11	Beulah Reservoir Bully Creek Owyhee Warmsprings	60.0 30.0 715.0 191.0	59.8 30.0 696.9 182.7	56.5 29.2 634.6 189.4	50.3 24.0 618.4 147.5

SUMMARY of SNOW MEASUREMENTS (COMPARISON WITH PREVIOUS YEARS)

(COMPARISON WITH PREVIOUS YE	EAKS)					
RIVER BASIN and/or	Number of Courses	THIS YEA	THIS YEAR'S SNOW WATER AS PERCENT OF			
SUB-WATERSHED	Averaged	Last Year	Average C			
Jordan Creek Malheur River Owyhee River	1 4 6	-	225 188 228			

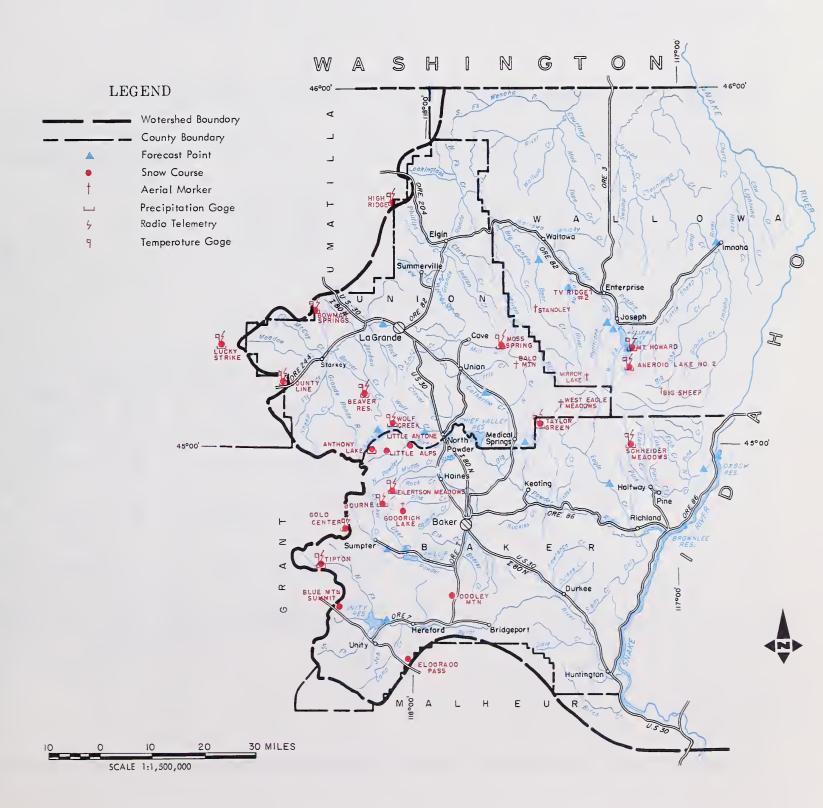
⁽a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

WATER SUPPLY OUTLOOK

BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS **OREGON**

GENERAL OUTLOOK

Water supplies will be very good this summer in Baker, Union and Wallowa Counties. The Burnt River streamflow will be much above normal. North of there the streamflow will be above average. Precipitation has been 94% of normal for April and 115% of normal for the November-April season. Snowpack is above average for the area. It ranges from 119% of average on the Grande Ronde watershed to 214% on the Burnt River watershed. All irrigation reservoirs are full except for Wallowa Lake which will have no trouble filling.



TREAMFLOW FORECASTS		THIS YEAR	`	PAST F	RECORD
	FORE	CAST	FORECAST	THOUSAND A	CRE FEET
BASIN, STREAM and/or FORECAST POINT	Thousand Acre Feet	Percent of Average	PERIOD	Last Year	Average (
Anthony Creek blw. North Fork nr. North Powder Bear near Wallowa Big Creek blw. Burn Creek nr. Medical Spring Burnt near Hereford Catherine near Union Deer Creek abv. Phillips Res. nr. Sumpter Eagle Creek abv. Skull Creek Grande Ronde at La Grande Hurricane near Joseph Imnaha at Imnaha Lostine near Lostine Pine Creek nr. Oxbow Powder near Sumpter Wallowa, East Fork near Joseph Wolf Creek Res. net Inflow	16 76 9.2 28 31 74 16.8 207 229 115 120 49 326 137 189 50 53 10.8 13.7 90 13.1	117 129 141 168 170 137 147 139 139 120 120 111 127 117 120 116 120 127 127 127 130 156	May-July May-Sept. May-July May-Sept. May-Sept. May-July May-Sept. May-July May-Sept. May-Sept. May-Sept. May-Sept. May-Sept. May-Sept. May-Sept. May-July		13.7 59 6.5 16.7 18.2 54 11.4b 149 165 96 100 44 256 117 157 157 b 43 44 8.5 10.8 69 8.4

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	PECENIOLE	Usable		sable Stora	ige
Thief Valley 17.4 18.0 18.1 17.4 Unity 25.2 25.4 25.4 24.1 Wallowa Lake 37.5 17.1 32.0 30.9	RESERVOIR	Capacity	This Year	Last Year	Average ^C
	Thief Valley Unity Wallowa Lake	73.5 17.4 25.2 37.5	73.1 18.0 25.4 17.1	75.9 18.1 25.4 32.0	59.1 17.4 24.1

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

(COMPARISON WITH PREVIOUS Y	EARS)			
RIVER BASIN and/or	Number of Courses	THIS YEAR'S SNOW WATER AS PERCENT OF		
SUB-WATERSHED	Averaged	Last Year	Average C	
Burnt River Grande Ronde River	4	-	214	
above La Grande	3	-	119	
Powder River Wallowa, Imnaha,	5	408	158	
Catherine Creek	6	230	139	
ENDERACT DATE of LOW E	LOW VALUE	FC		

FORECAST DATE of LOW FLOW VALUES

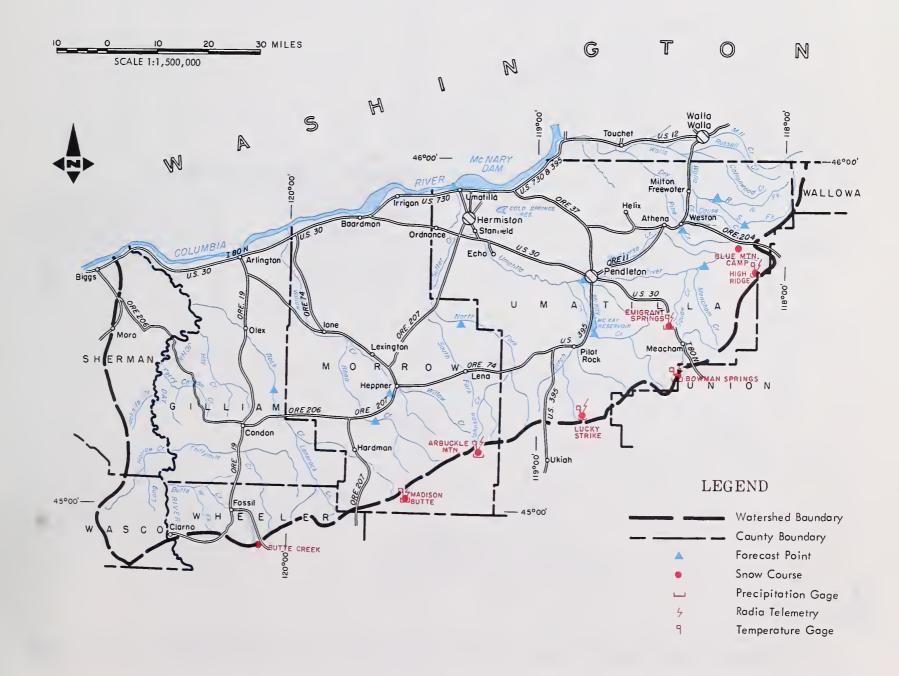
	ILON TAL	OLU	
FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Eagle Cr.abv.Skull Cr.	225 160	Aug. 12 Aug. 26	July 25 Aug. 5 Avg.value
Catherine Cr.nr.Union	6 6 100 50	Aug. 1 July 21 Aug. 9	49 July 9 July 28
Powder near Sumpter	100 20	June 30 July 26	June 25 July 22
Deer Cr. abv. Phillips Res. nr. Sumpter	40 10	June 22 July 16	June 17 July 6

WATER SUPPLY OUTLOOK

UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS OREGON

GENERAL OUTLOOK

Water supplies will be very good this summer in Gilliam, Morrow and Umatilla Counties. Streamflow ranges from 105% of normal on Rhea Creek to 164% on McKay Creek. The snowpack is much above normal ranging from 128% on the Walla Walla to 186% of normal on McKay Creek. Precipitation for April was 93% of normal and 107% for the November-April season. Reservoir storage is above normal for this time of year.



			1	ECORD
FORECAST FORECAST		THOUSAND ACRE FEET		
Thousand Acre Feet	Percent of Average	PERIOD	Last Year	Average
4.8	133 141	May-July May-July		3.5 1.7b
12.0	164 133	May-Sept. May-July		7.3 0.9b 1.9
2.8	112 119	May-July May-July		2.5 <i>b</i> 43 49
89 65	120 120	May-July May-Sept.		74 54 2.7
	4.8 2.4 12.0 1.2 2.0 2.8 51 58 89	4.8 133 2.4 141 12.0 164 1.2 133 2.0 105 2.8 112 51 119 58 118 89 120 65 120	Thousand Acre Feet	Thousand Acre Feet

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value	RESERVOIR

Umatilla at Pendleton 550 June 3 May 17

So. Fk. Walla Walla 200 June 26 June 9
Avg.value Aug.-Sept. 105
min.flow

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR STORAGE (1)	ilououilu i	10. 11.)	LIND OF I	ONTH
BECEDVOLD	Usable	U	sable Stora	ge
RESERVOIR	Capacity	This Year	Last Year	Average C
Cold Springs McKay	50.0 73.8	50.1 67.5	47.0 67.8	47.8 55.0

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN	Number of	THIS YE.	AR'S SNOW		
and/or	Courses	WATER AS PERCENT O			
SUB-WATERSHED	Averaged	Last Year	Average C		
McKay Creek Umatilla River Walla Walla River	3 3 2	713 332 361	186 139 128		

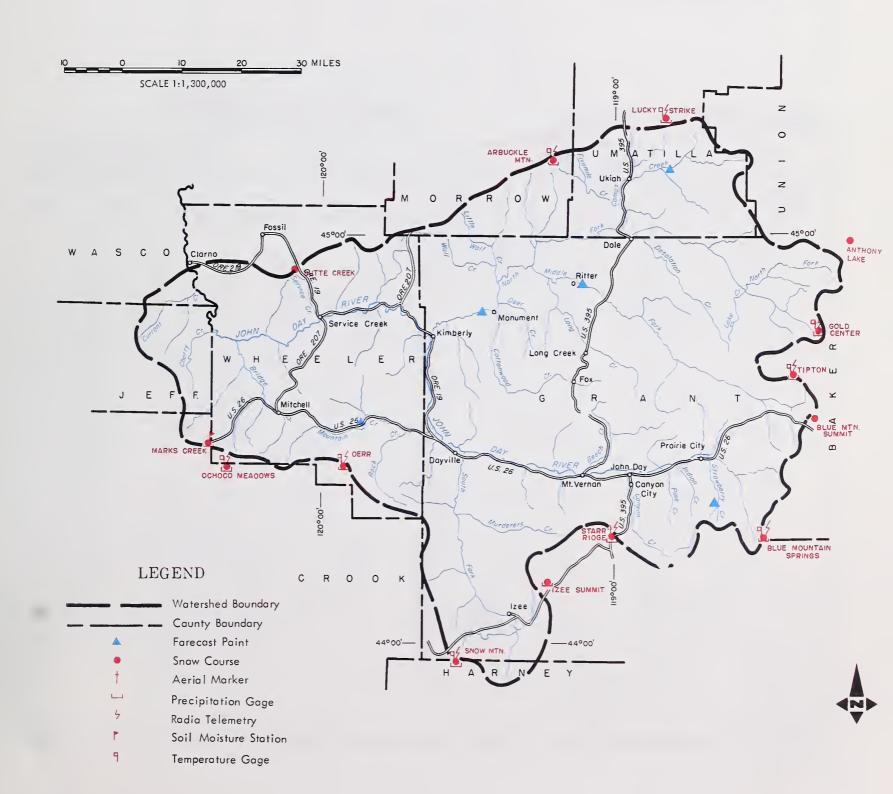
WATER SUPPLY OUTLOOK

UPPER JOHN DAY WATERSHEDS

OREGON

GENERAL OUTLOOK

Water supplies will be very good this summer. Streamflow is forecast to be above normal. The snowpack is much above normal (190%). April precipitation was below normal (80%) but for the November-April season it is much above normal (135%).



	THIS YEAR	PAST RECORD			
FORE	CAST	FORECAST	THOUSAND ACRE FEET		
Thousand Acre Feet	Percent of Average	PERIOD	Last Year	Average	
20 88 93 451 470 2.8 9.0 9.8	122 122 128 128 128 147 132 132	May-July May-July May-Sept. May-July May-Sept. May-July May-July May-July May-Sept.		16.4 72 76 352 367 1.92 6.8 7.4	
	Thousand Acre Feet 20 88 93 451 470 2.8 9.0	FORECAST Thousand Acre Feet Percent of Average 20 122 88 122 93 122 451 128 470 128 2.8 147 9.0 132	Thousand Acre Feet Percent of Average PERIOD 20 122 May-July 88 122 May-July 93 122 May-Sept. 451 128 May-July 470 128 May-Sept. 2.8 147 May-July 9.0 132 May-July	Thousand Percent of Average PERIOD Last Year	

SUMMARY of SNOW MEASUREMENTS (COMPARISON WITH PREVIOUS YEARS)

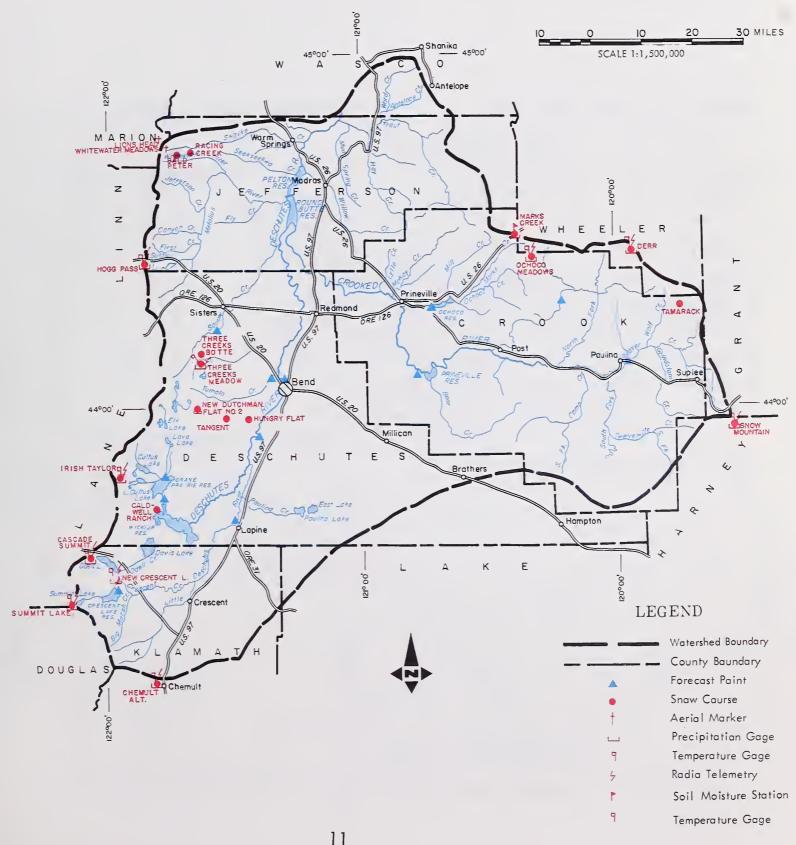
				(COMPARISON WITH PREVIOUS YEARS)				
FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value		RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged		AR'S SNOW PERCENT OF
	Second/ Pt.	Flow Value	Value	<u> </u>	SUB-WATERSHED	Averaged	Last Year	Average C
John Day at Service Creek	352	Aug. 1	Avg.value 212		John Day, North Fork John Day abv. Dayville	7 4	2854 -	190 187

⁽a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

UPPER DESCHUTES, CROOKED WATERSHEDS **OREGON**

GENERAL OUTLOOK

Water supplies will be very good this summer. Streamflow forecasts range from 114% of normal for Crescent Creek to 202% for the Ochoco Reservoir inflow. The snowpack is much above normal throughout the area. April precipitation was excellent (174% of normal). For the November-April season the precipitation was 159% of normal. Most reservoirs are close to being full except for Crescent Lake which is only 43% of capacity. It will not fill this year.



TREAMFLOW FORECASTS		THIS YEA	PAST RECORD		
	FORE	CAST	FORECAST	THOUSAND ACRE FEET	
BASIN, STREAM and/or FORECAST POINT	Thousand Acre Feet	Percent of Average	PERIOD	Last Year	Average C
Beaver Creek near Paulina Crane Prairie Reservoir total Inflow Crescent at Crescent Lake Crooked River nr. Prineville Crooked R.,No. Fk. blw. Lookout Cr.nr. Paulina Deschutes below Bend Deschutes at Benham Falls Deschutes below Snow Creek Deschutes, Little near La Pine Ochoco Reservoir net Inflow Squaw Cr. near Sisters Tumalo near Bend	7.7 7.9 98 163 17.6 22 60 7.1 184.2 335 555 83 86 101 17 57 48	157 157 154 154 114 111 165 115 115 146 154 151 202 127 117	May-July May-Sept. May-July May-Sept. May-July May-Sept. May-July May-July AugSept. May-July May-Sept. May-July May-Sept.	Last Tear	4.9 5.0 64 106 15.5 19.8 35 4.3b 291 483 57 56 67 8.4 45

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

Usable Storage

31.4 29.0 46.8 159.7 180.5

Average C

45.8

66.5 37.8 145.0 189.4

				HEGERTOIN GIGHNAE (
FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value	RESERVOIR	Usable Capacity	This Year
Crane Prairie net Inflow	518 320 Peak	Peak Oct. 31 June 10		Crane Prairie Crescent Lake Ochoco	55.3 86.9 47.5	44.6 37.6 42.1
Crooked R. nr. Post	100	June 16	June 1	Prineville Wickiup	153.0 200.0	155.1 191.5
Deschutes below Bend	1500	**	July 1			
Little Deschutes nr. La Pine	400 200		June 7 July 8			
Squaw Cr. nr. Sisters	100	Sept. 21	Aug. 16			
Tumalo Cr. nr. Bend	235 207 150 71	July 11	June 23 June 25 July 5 Aug. 7	CHMMADY of CHOW M	EA CUDEM	ENTC
				SUMMARY of SNOW MI	CHOUKEM	EU12

** Will stay above 1500 cfs this year.

(COMPARISON WITH PREVIOUS YEARS)									
RIVER BASIN and/or	Number of Courses	THIS YEAR'S SNOW WATER AS PERCENT OF							
SUB-WATERSHED	Averaged	Last Year	Average C						
Crooked, Ochoco Deschutes abv. Wickiup Little Deschutes Tumalo & Squaw Crs.	- 2 4 3	- 313 402 572	- 137 134 148						

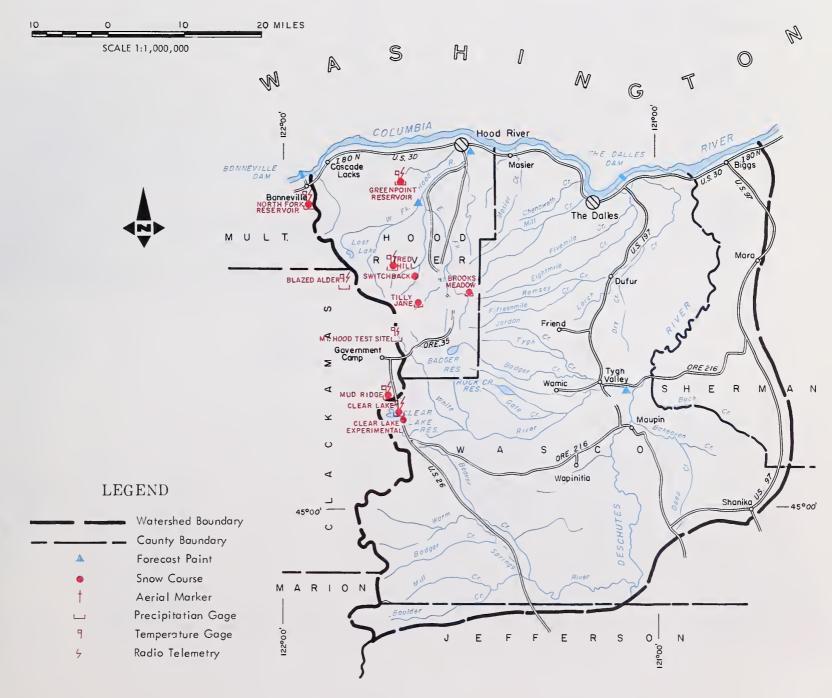
⁽a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

WATER SUPPLY OUTLOOK

HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS OREGON

GENERAL OUTLOOK

Water supplies in Wasco and Hood River Counties will be good this summer. Streamflow is forecast to be 110% of normal on Hood River and 116% on the White River. The snowpack is 111% of normal. Precipitation for April was 103% of normal and for the November-April season it has been 124% of normal. Clear Lake in Wasco County is currently at 45% of capacity.



STREAMFLOW FORECASTS		THIS YEAR	3	PAST	RECORD	
	FORE	CAST	FORECAST	THOUSAND ACRE FEET		
BASIN, STREAM and/or FORECAST POINT	Thousand Acre Feet	Percent of Average	PERIOD	Last Year	Average ^C	
Hood River at Tucker Bridge nr. Hood River Hood River, West Fork near Dee White below Tygh Valley	186 238 96 120 94 111	110 110 110 110 116 116	May-July May-Sept. May-July May-Sept. May-July May-Sept.		169 216 87 109 81 96	

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

EODECAST POINT	Low Flow	Forecast Date Stream Will	Average Date	RESERVOIR	Usable	U	sable Stor	age
FORECAST POINT	Value Second/Ft.	Recede to Low Flow Value	of Low Flow Value	RESERVOIR	Capacity	This Year	Last Year	Average ^C
Clear Branch Inflow	*42	July 15-3	**39	Clear Lake (Wasco)	11.9	5.3	3.2	6.7
*Average cfs forecast to flow for this two-week period.								
**Average cfs for period of record.								
White blw. Tygh Valley	200	July 14	July 3					
	172	Aug. 1	Avg.value					
				SUMMARY of SNOW ME	 ASIIREME) PTM		
				(COMPARISON WITH PREVIOUS	YEARS)		FILIS NEA	Ne show 1
				RIVER BASIN and/or	Number of Courses Average	s WA	TER AS PI	R'S SNOW ERCENT OF
				SUB-WATERSHED	, ttolage	Las	st Year	Average C
				Hood River	3	5	03	111
				Mile Creeks White River	3	5	03	111

(a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

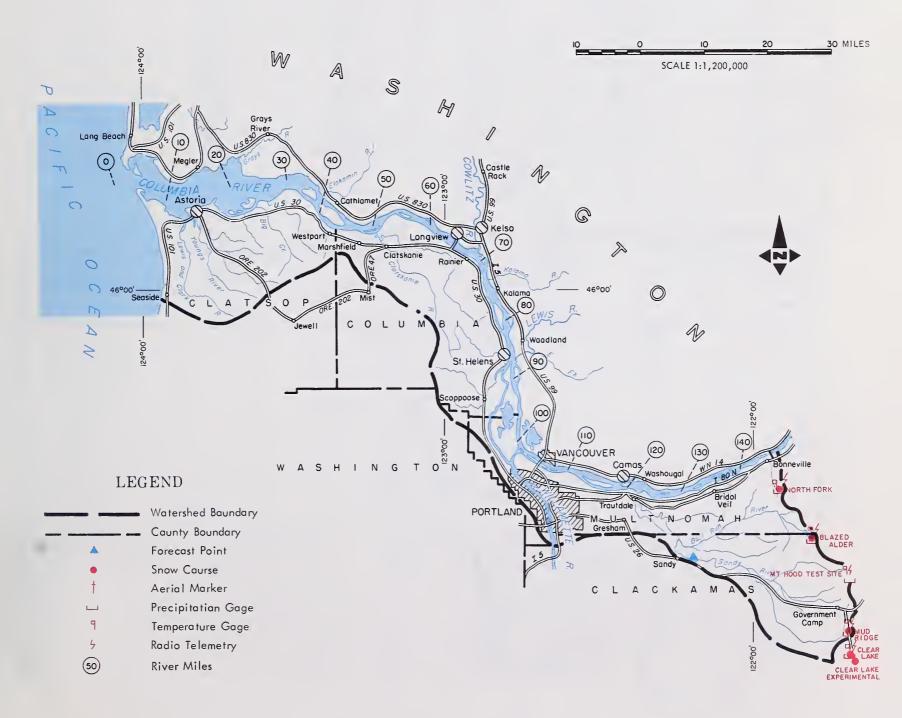
WATER SUPPLY OUTLOOK

LOWER COLUMBIA WATERSHEDS

OREGON

GENERAL OUTLOOK

Water supplies will be above average on the Lower Columbia this summer. The snowpack on the Columbia watershed is 124% of normal and for the Sandy River it is 113% of normal. Streamflow for the Columbia at The Dalles will be above average and for the Sandy River it will be near average (95%).



SUMMARY OF SNOW MEASUREMENTS (COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or	Number of Courses		AR'S SNOW PERCENT OF
SUB-WATERSHED	Averaged	Last Year	Average C
Sandy River	2	480	113

	THIS YEA	R	PAST RECORD		
FORE	CAST	FORECAST	THOUSAND	ACRE FEET	
Thousand Acre Feet	Percent of Average	PERIOD	Last Year	Average C	
89,400	118 118	May-July May-Sept.		76,010 90,980	
218	95 95	May-July May-Sept.		230 285	
	Thousand Acre Feet 89,400 107,000 218	## FORECAST Thousand Percent of Average 89,400 118 107,000 118 218 95	Thousand Acre Feet Percent of Average PERIOD 89,400 118 May-July 107,000 118 May-Sept. 218 95 May-July	FORECAST Thousand Acre Feet Percent of Average PERIOD 89,400 118 107,000 118 May-July 107,000 118 May-Sept. 218 95 May-July	

HISTORICAL DATA (Columbia River at The Dalles)

		STREAMFLOW d(1,000 A F)			
YEAR	APR - SEPT.	APR — JUNE	MAY - JUNE	REGULATED PEAK (I,000 cfs)	DATE
1963	87,860	58,499	47,812	437	June 18
1964	110,422	73,512	63,670	662	June 18
1965	114,222	80,098	62,467	520	June 9
1966	87,386	58,250	45,962	396	June 12
1967	109,319	74,378	66,452	622	June 10
1968	89,102	55,593	47,994	404	June 13
1969	112,377	85,742	63,899	515	May 15
1970	88,243	62,993	55,227	425	May 28
1971	126,898	91,781	76,453	557	May 13
1972	135,500	97,041	81,451	619	June 20
1973	65,549	43,765	36,565	221	December
1974	139,501	99,035	78,946	588	June 20
1975		73,018	62,861	422	May 17
1976	122,771	79,084	62,554	418 213	May 14
1977	54,108	35,505	28,394		January 2
1963-77 Avg.	103,478	71,220	58,714	468	

LOWER COLUMBIA RIVER FLOOD STAGES (with 9.5' tide at Astoria)

		DRAINAGE DISTRICT PUMPHOUSE							
VANCOUVER	FLOW AT	SANDY	SAUVIE ISL.	SCAPPOOSE	DEER ISL.	RAINIER	BEAVER	WOODSON	
GAGE (Weather Bu)	THE DALLES (1,000 c.fs)				RIVER MILES		• • • • • • • • • • • • • • • • • • • 		
(Wediner Bu)	(1,000 c.rs)	118.9	96.0	91.0	77.0	62.0	52.0	47. 0	
35 (1894)	1210	41.2	34.2	33.3	28.5	21.9	17.5	15.5	
34	1160	40.5	33.5	32.5	27.7	21.2	17.0	15.0	
33	1100	39.6	32.4	31.4	26.7	20.2	16.1	14.3	
32 (1972)	1050	38.9	31.5	30.5	25.7	19.5	15.4	13.7	
31 (1948)	1000	38.0	30.7	29.5	25.1	18.8	14.7	13.0	
30	943	36.6	29.5	28.5	24.3	18.1	14.0	12.4	
29	897	35.5	28.5	27.7	23.7	17.5	13.4	11.8	
28	853	34.3	27.5	26.7	22.8	17.0	13.0	11.4	
27 (1956)	811	33.0	26.5	25.6	21.8	16.2	12.5	11.0	
26 (1950)	771	32.1	25.5	24.6	20.9	15.5	12.2	10.7	
25	733	30.7	24.2	23.2	19.7	14.6	11.7	10.3	
24	697	29.7	23.0	22.2	19.0	14.1	11.4	10.2	
23	662	29.0	22.3	21.4	18.4	13.6	11.2	10.0	
22	628	28.1	21.4	20.3	17.2	13.0	10.9	9.7	
21	595	27.2	20.7	19.5	16.4	12.6	10.6	9.6	
20 (1954)	564	26.2	19.8	18.6	15.5	12.1	10.2	9.4	
19	534	25.5	19.2	18.0	15.0	11.8	10.0	9.3	
18	501	24.4	18.3	17.2	14.3	11.4	9.8	9.1	
17	479	23.4	17.4	16.4	13.7	11.0	9.6	8.9	
16	452	22.4	16.5	15.5	13.0	10.5	9.3	8.7	

WATER SUPPLY OUTLOOK WILLAMETTE WATERSHEDS OREGON

GENERAL OUTLOOK

Water supplies will be good this summer. Streamflow is forecast to be above average throughout the Willamette River basin and its tributaries. The only exception to this is the Clackamas River which will flow at 105% of normal. Snowpack is near normal on the Clackamas and Row Rivers. It is above normal on the McKenzie (127%), Middle Fork of the Willamette (128%) and Santiam (132%) Rivers. Precipitation was 139% of normal for April and for the November-April season it has been 125% of normal.



REAMFLOW FORECASTS		THIS YEA	PAST RECORD		
	FORE	CAST	FORECAST	THOUSAND A	CRE FEET
BASIN, STREAM and/or FORECAST POINT	Thousand Acre Feet	Percent of Average	PERIOD	Last Year	Average
Clackamas at Estacada	494	105	May-July		470
lackamas above Three Lynx	613 382	105 105	May-Sept. May-July		584 364
McKenzie at McKenzie Bridge	483 379	105	May-Sept. May-July		460 338
CKenzie near Vida	542 845	112	May-Sept. May-July		484
CKenzie, So. Fork near Rainbow	1,115	115	May-Sept.		735 970
	188	110	May-July May-Sept.		144 171
lohawk River near Springfield Lak Grove Fork above Power Intake	40 102	125 102	May-July May-July		32 100
ow near Dorena	14 1 56	102 108	May-Sept. May-July		1 38 52
antiam, North at Mehama	62 617	108 122	May-Sept. May-July		57 506
antiam, South at Waterloo	712 362	116 112	May-Sept. May-July		614 323
coggins Creek nr. Gaston	410 5.9	112 115	May-Sept. May-July		366 5.1
homas Creek near Scio illamette, Coast Fork nr. London	44 15.9	112	May-July May-July		39 13.8
illamette, Mid. Fk.blw. N.Fk. nr. Oakridge	546	116	May-July		471
illamette, No. Fk. of Mid. Fk. near Oakridge	660 145	116 116	May-Sept. May-July		569 125
illamette at Salem	169 2,758	116 108	May-Sept. May-July		146 2,554
	3,281	108	May-Sept.		3,038

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RESERVOIR	STORAGE (The	nusand Ac	Ft)	END OF MONTH
VESEVADIV	2 I DIVAGE (I III	Jusanu mo.	1 (.)	END OF MONTH

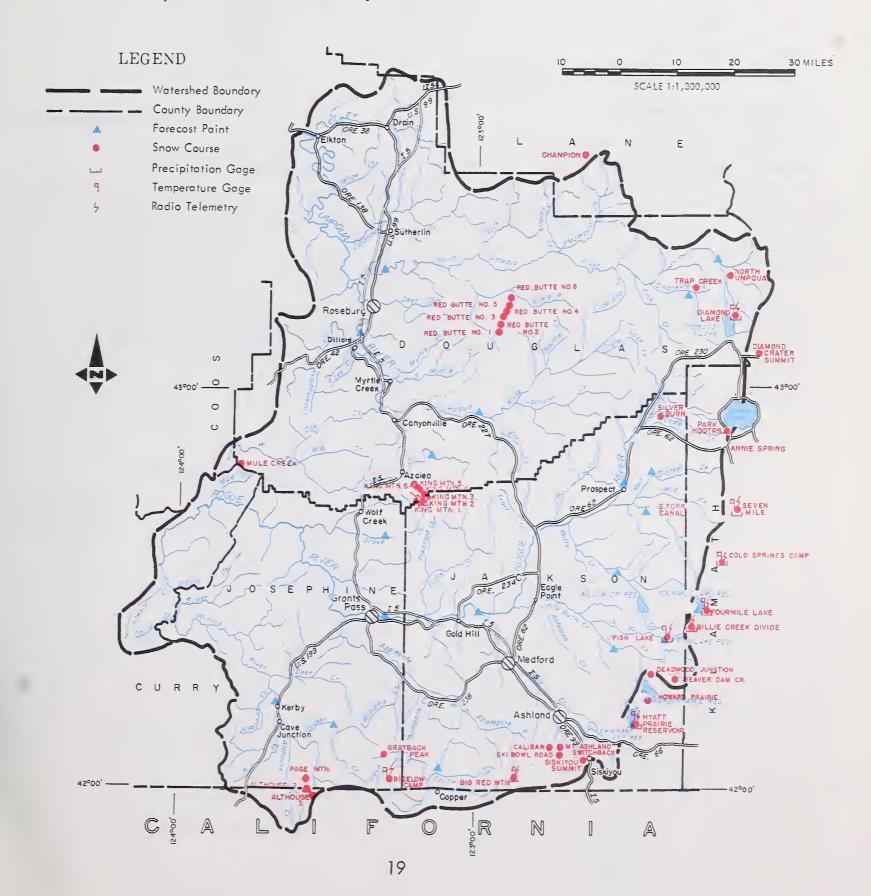
(00	MPARISON WITH PREVIOUS	YEARS)			RESERVUIR STURAGE (iivusaiiu i	46. I (.)	ENDOFN	10N I H
	RIVER BASIN and/or	Number of Courses		AR'S SNOW PERCENT OF	RESERVOIR	Usable	Ĺ	Jsable Stora	ge
	SUB-WATERSHED	Averaged	Last Year	Average C	NESERVOIR	Capacity	This Year	Last Year	Average ^C
M R S	lackamas River cKenzie River ow River antiam River illamette, Mid. Fk.	2 3 2 4 4 4	- 489 - 697 410	103 127 104 132 128	Blue River Cottage Grove Cougar Detroit Dorena Fall Creek Fern Ridge Foster Green Peter Hills Creek Lookout Point Timothy Lake Henry Hagg Lake * Multiple purpose reservoirspace reserved primarily for flood runoff.	85.6* 30.0* 155.2* 299.9* 70.5* 115.0* 94.2* 30.0* 270.0* 200.0* 337.2* 61.7 53.0	70.6 21.8 131.7 259.6 52.5 95.6 93.6 1.3 227.1 168.0 287.7 53.6 53.1	73.5 23.5 126.2 279.0 55.7 102.3 93.9 1.3 251.5 174.6 208.7 51.9 53.1	74.9 23.4 109.2 231.2 55.7 95.2 83.9 16.65 209.1 146.3 227.4 60.4

⁽a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

WATER SUPPLY OUTLOOK ROGUE, UMPQUA, WATERSHEDS OREGON

GENERAL OUTLOOK

Water supplies will be good this summer. Streamflow over most of the area will be above normal. The Applegate and Illinois Rivers will be near normal (95% and 100% respectively). Snowpack is above normal on the North Umpqua (127%) and Rogue (123%) Rivers. Butte and Bear Creek snowpack is near normal. April precipitation was 133% of average and for the winter season it has been 130% of average. Most reservoirs in the area are close to being full. Fourmile Lake is an exception to this, at 40% of capacity. It is not expected to fill this year.



STREAMFLOW FORECASTS		THIS YEAR	R	PAST RECORD		
	FORE	CAST	FORECAST	THOUSAND ACRE FEET		
BASIN, STREAM and/or FORECAST POINT	Thousand Acre Feet	Percent of Average	PERIOD	Last Year	Average ^C	
Applegate near Copper	77	95	May-July		81	
	84	95	May-Sept.		88	
Clearwater above Trap Creek	62	105	May-Sept.		59	
Cow Creek nr. Azalea	8.7	105	May-July		8.3	
Fourmile Lake net Inflow	5.3	183	May-July		2.9	
Grave Creek at Pease Bridge nr. Placer	3.2	103	May-July		3.1	
Hyatt Reservoir net Inflow	3.1	115	May-July		2.7	
Illinois River near Kerby	83	100	May-July		83	
	90	100	May-Sept.		90	
Little Butte, N. Fk. at Fish Lake	17.8	149	May-Sept.		11.9	
Little Butte, S. Fk. near Lake Creek	23	125	May-July		18.5	
	26	125	May-Sept.		21	
Red Blanket Creek nr. Prospect	32	117	May-July		27	
Rogue above Prospect	224	118	May-July		190	
	291	118	May-Sept.		247	
Rogue, South Fork near Prospect	54	113	May-July		48	
	67	113	May-Sept.		59	
Roque at Raygold near Central Point	615	120	May-July		512	
	811	120	May-Sept.		675	
Roque at Grants Pass	783	121	May-Sept.		647	
Sucker Cr. blw. Little Grayback nr. Holland	39	105	May-July		37	
Umpqua, No.blw. Lemolo Lake, nr. Toketee Falls	168	117	May-Sept.		144	
Umpqua, No. at Winchester	561	114	May-July		490	
Umpqua, So. near Brockway	202	110	May-July		184	
Umpqua, So. at Tiller	109	105	May-July		104	
So.Fk. Big Butte Cr. nr. Butte Falls	40	121	May-Sept.		33	

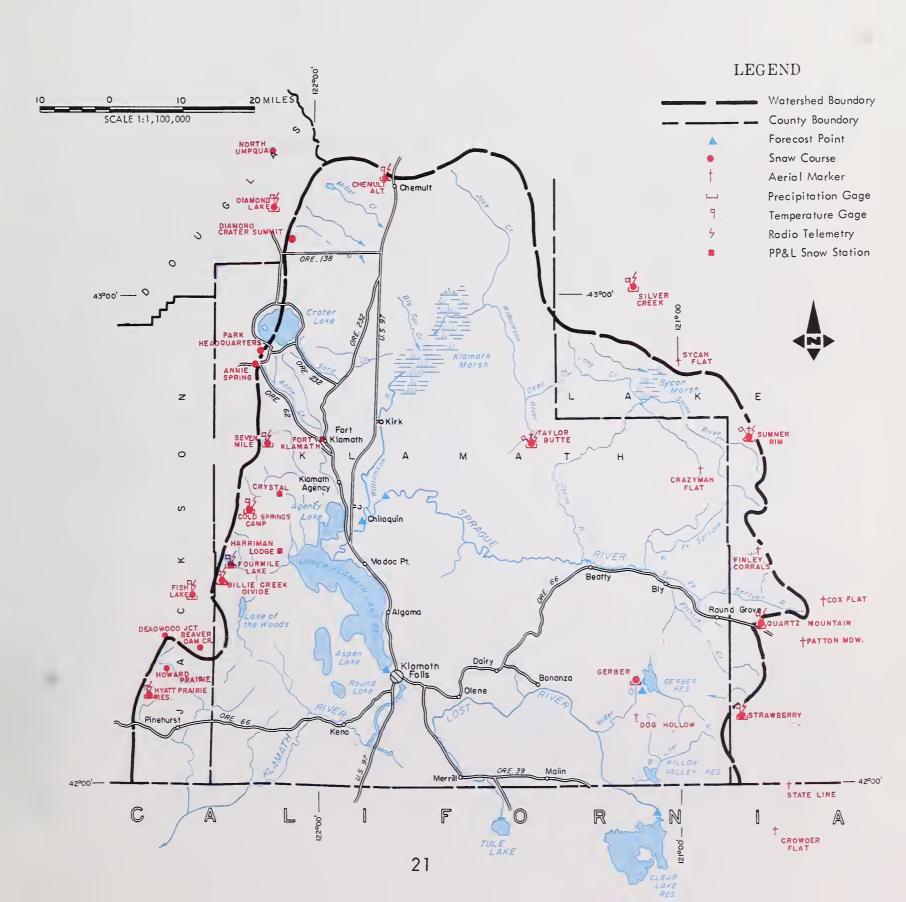
RESERVOIR S	STORAGE ((Thousand	Ac. Ft.)	END OF MONTH
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			HEOEHTOM OTOMHOL (2,10 01	11011111
Low Flow Value		Average Date	RESERVOIR	Usable			age
Second/Ft.	Recede to Low Flow Value	Value	TESET TOTAL	Capacity	This Year	Last Year	Average ^C
20 10	July 1 Aug. 15	July 4 Aug. 19	Applegate Emigrant Lake Fish Lake	75.2 39.0 8.0	5.2	37.5 4.9	37.1 6.4
100	June 16	May 15	Fourmile Lake Howard Prairie Hyatt Prairie	16.1 60.0 16.1	6.5 60.6 16.2		52.8
90	Aug. 10	July 30	Lost Creek	315.0	281.3	315.0	
140 90 60	July 13 Aug. 5 Sept. 4	July 10 July 39 Aug. 27					
				YEARS) Numbe Cours	r of WA	TER AS PE	
			Applegate Bear Creek Butte Creek Illinois River North Umpqua Rogue River Mt. Ashland	- 2 4 - 3 4 4	8	- - - 75	- 108 92 - 127 123 115
	Value Second/Ft. 20 10 100 90	Second/Ft. Recede to Low Flow Value 20 July 1 10 Aug. 15 100 June 16 90 Aug. 10 140 July 13 90 Aug. 5	Value Second/Ft. Recede to Low of Low Flow Value	Low Flow Value Stream Will Recede to Low Flow Value Second/Ft. 20 July 1 July 4 Aug. 15 Aug. 19 100 June 16 May 15 90 Aug. 10 July 30 140 July 13 July 10 90 Aug. 5 July 39 60 Sept. 4 Aug. 27 SUMMARY of SNOW ME (COMPARISON WITH PREVIOUS) RESERVOIR Applegate Emigrant Lake Fish Lake Fourmile Lake Howard Prairie Hyatt Prairie Lost Creek SUMMARY of SNOW ME (COMPARISON WITH PREVIOUS) RIVER BASIN and/or SUB-WATERSHED Applegate Bear Creek Butte Creek Illinois River North Umpqua Rogue River	Low Flow Value Sream Will Recede to Low Flow Value Second'Ft. 20 July 1 July 4 Aug. 15 Aug. 19 100 June 16 May 15 90 Aug. 10 July 30 140 July 13 July 10 90 Aug. 5 July 30 60 Sept. 4 Aug. 27 SUMMARY of SNOW MEASUREM (COMPARISON WITH PREVIOUS YEARS) RIVER BASIN Andrew Sub-Water Sub-W	Comparison Will Stream Will Stream Will Stream Will Recede to Low Flow Value Reservoir Reservoir	Name

WATER SUPPLY OUTLOOK KLAMATH WATERSHEDS OREGON

GENERAL OUTLOOK

Klamath County will have very good water supplies this summer. Streamflow is forecast to be from 134% to 160% of normal. The snowpack is above normal throughout the county except for the Lost River which is only 71% of normal. April precipitation was very good (165% of normal). The November-April precipitation season has also been very good (173% of normal).



STREAMFLOW FORECASTS THIS YEAR		THIS YEAR				PAST RECORD		
FORE	CAST	FORECAST	THOUSAND A	CRE FEET				
usand e Feet	Percent of Average	PERIOD	Last Year	Average ^C				
17.3 5.4 225 172 399	99 100 135 134 140	May-Sept. May-Sept. May-Sept. May-Sept. May-Sept.		17.5 5.4 167 342 285				
	17.3 5.4 25	Percent of Average 17.3 99 5.4 100 25 135 72 134	Percent of Average PERIOD 17.3 99 May-Sept. 5.4 100 May-Sept. 25 135 May-Sept. 72 134 May-Sept.	Percent of Average				

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable	U	sable Stora	ge
RESERVOIR	Capacity	This Year	Last Year	Average ^C
Clear Lake Gerber Upper Klamath Lake	440.2 94.0 584.0	355.0 96.2 466.9	182.4 46.5 494.0	294.2 76.8 467.7

SUMMARY of SNOW MEASUREMENTS (COMPARISON WITH PREVIOUS YEARS)

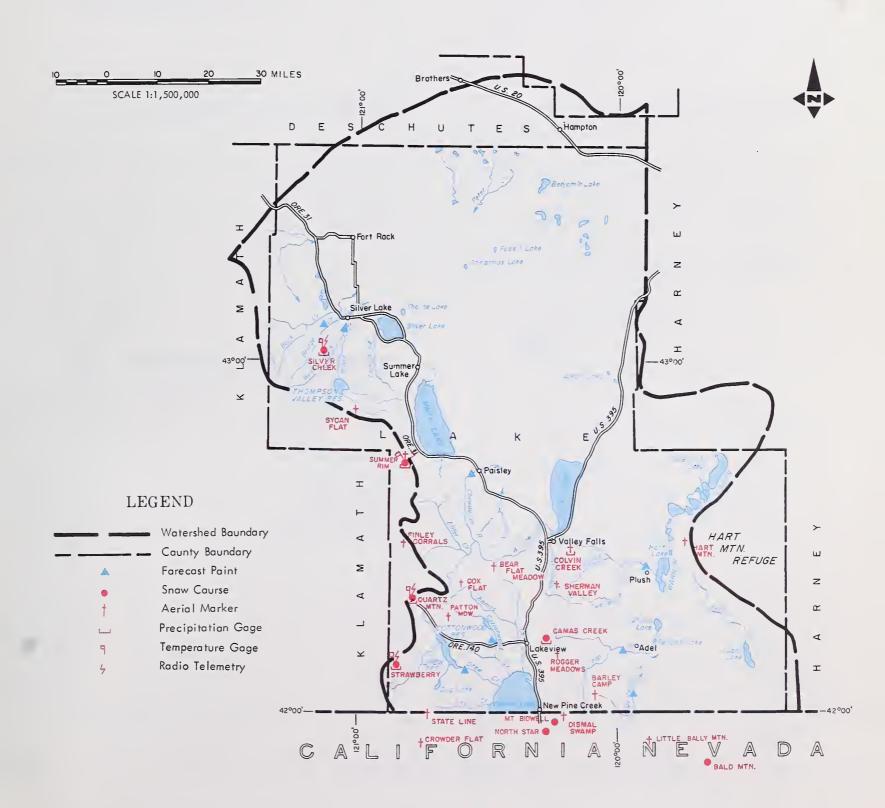
RIVER BASIN	Number of		AR'S SNOW
and/or	Courses		PERCENT OF
SUB-WATERSHED	Averaged	Last Year	Average C
Lost River	1		71
Sprague River	2		114
Upper Klamath	5		127
Williamson River	3		114

WATER SUPPLY OUTLOOK

LAKE COUNTY, GOOSE LAKE WATERSHEDS OREGON

GENERAL OUTLOOK

Water supplies for Lake County will be excellent this summer. Streamflow will be much above average throughout most of the County. It ranges from 100% of normal for the Drews Reservoir inflow to 155% for Silver Creek. Precipitation was near normal for April and 181% of normal for the November-April season. Snowpack is much above average except for the Drew Creek watershed where it is only 68% of average. All three principle irrigation reservoirs are now full.



STREAMFLOW FORECASTS		THIS YEAR			PAST RECORD		
	FORE	CAST	FORECAST	THOUSAND A	CREFEET		
BASIN, STREAM and/or FORECAST POINT	Thousand Acre Feet	Percent of Average	PERIOD	Last Year	Average (
Cottonwood Creek nr. Lakeview Deep above Adel Drews Reservoir net Inflow Honey Creek near Plush Silver Creek near Silver Lake Twentymile near Adel Bridge Cr.nr. Spahr Ranch nr. Silver Lake	87 93 9.3 56 59 10.6 17.4 17.6 12.6 14.2 4.4	150 150 145 122 122 100 140 140 155 125 145	May-July May-Sept. May-July May-July May-Sept. May-July May-July May-Sept. May-July May-Sept. May-July		58 62 6.4 46 48 10.6 12.4 12.6 8.1 11.4 3.0		

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

FOREGUET POWE	Low Flow	Ju Calli min	Average Date	RESERVOIR	Usable		Usable Stor	age
FORECAST POINT	Value Second/Ft.	Recede to Low Flow Value	of Low Flow Value	KESEKVOIK	Capacity	This Year	Last Year	Average C
Deep Cr. above Adel Honey Cr.nr. Plush	1 00 10 0 50	June 29 June 17 June 27	June 21 May 15 May 30	Cottonwood Drews Thompson Valley	8.7 63.0 19.5	8.7 63.5 19.5	5 46.6	6.2 59.0
Twentymile near Adel	50 10	June 20 July 21	June 2 July 3					
				SUMMARY of SNOW ME	ASUREM	 ENTS		
				(COMPARISON WITH PREVIOUS	S YEARS)	·		nic chow
				RIVER BASIN and/or SUB-WATERSHED	Numb Cour Aver	ses	THIS YEA WATER AS P	ERCENT OF Average C
				Chewaucan River Deep Creek Drew Creek Honey Creek Silver Creek Twentymile Creek	2 1 2 1 1 1 -			114 152 68 152 133

⁽a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

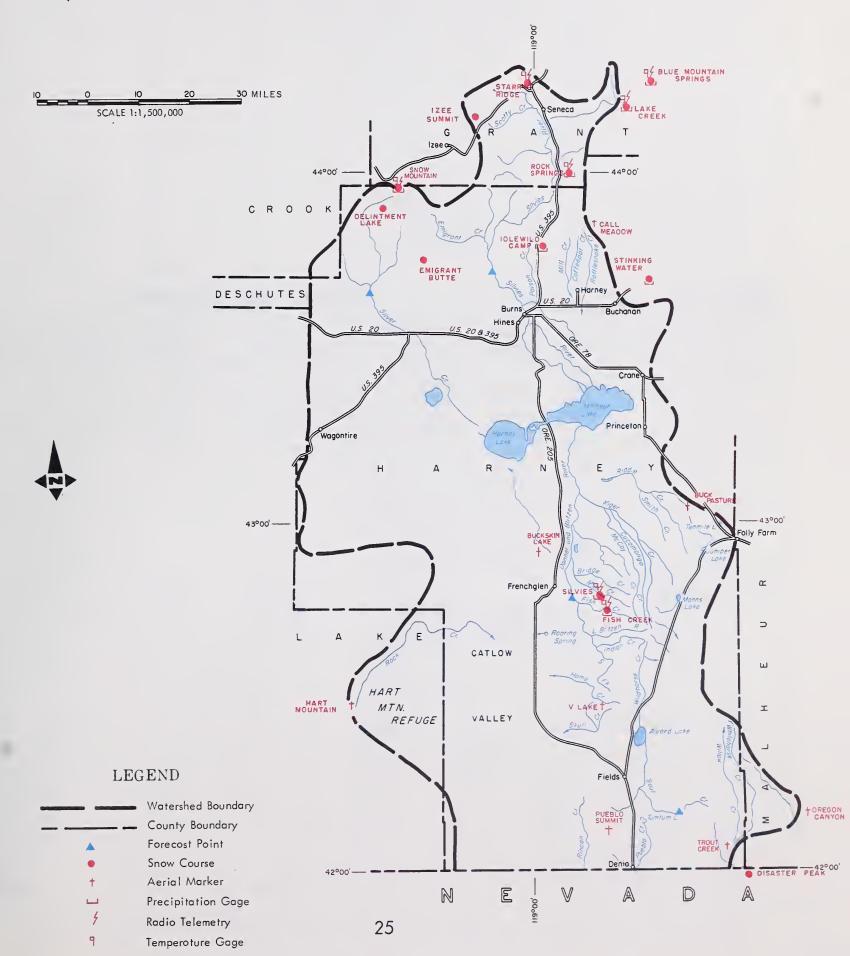
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WATER SUPPLY OUTLOOK HARNEY BASIN WATERSHEDS

OREGON

GENERAL OUTLOOK

Harney County will have excellent water supplies this summer. Streamflow is forecast to be 170% of normal on the Silvies and Silver Rivers. Trout Creek and Donner und Blitzen will flow near 120% of normal. April precipitation was 83% of normal while the November-April season was 135%. Snowpack on the Silvies River watershed is 190% of normal.



STREAMFLOW FORECASTS		THIS YEA	R	PAST RECORD		
	FORE	CAST	FORECAST	THOUSAND ACRE FEET		
BASIN, STREAM and/or FORECAST POINT	Thousand Acre Feet	Percent of Average	PERIOD	Last Year	Average (
Donner und Blitzen near Frenchglen Silver near Riley Silvies River near Burns Trout Creek near Denio	50 57 10.0 65 68 7.8 8.4	123 123 170 170 170 120 120	May-July May-Sept. May-July May-July May-Sept. May-July May-Sept.		41 46 5.9 38 40 6.5 7.0	

SUMMARY of SNOW MEASUREMENTS (COMPARISON WITH PREVIOUS YEARS)

				. (0	(COMPARISON WITH PREVIOUS YEARS)						
FORECAST POINT	Low Flow Value	Forecast Date Stream Will Recede to Low	Average Date of Low Flow		RIVER BASIN and/or	Number of Courses	WATER AS	AR'S SNOW PERCENT OF			
	Second/Ft.	Flow Value	Value	} <u> </u>	SUB-WATERSHED	Averaged	Last Year	Average C			
Silvies nr. Burns	400 200 100 50	June 1 June 21 July 8 July 25	May 5 May 21 June 9 June 23		Donner und Blitzen Silver Creek Silvies River	- - 4	-	- - 190			
Donner und Blitzen	200 100	July 1 July 13	June 15 July 5		Trout Creek	-	-	-			
Malheur Lake at Break in Cole Island Dike	GAGE <u>HEIGHT</u>	SURFACE ACRES	AVG. SURFACE ACRES								
near Voltage July l Aug. l	4095.63 4095.18		40,000 33,000								
							1				

⁽a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

SNOW	T	HIS YEAR			ECORD	SNOW		THIS YEA	R	PASTRE	
DRAINAGE BASIN and or SNOW COURSE	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water (Inch	nes)	DRAINAGE BASIN and or SNOW COURSE	Date of Survey	Snow Depth	Water Cont.	Water Co Unch Last Yr.	esl
OWYHEE MALHEUR WATERSHEDS AREA 1				2331 77,		BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS				2231 11.	
Antelope Ridge (Ida.) Battle Creek (Ida.) *	4 /27	8	27.5	9.7	21.3	AREA 2 Aneroid Lake =2	4/26	113	17.6	24.2	36.
Bear Creek (Nev.)* Big Bend (Nev.) Blue Mountain Springs	4/27 4/27 4/29	61 20 46	8.3	0.0	2.5	Aneroid Lake =2 Plw. (T) Aneroid Lake =2 Plw. (S)	N/R 4/26	112		25.5	JO.
Blue Mtn. Spgs. Plw.(T) Blue Mtn. Spgs. Plw.(S)	N/R 4/29	50	23.5	0.1	6.85	Aneroid Lake =2 Plw. (M) Anthony Lake	N/R 4/29	82	40.8	23.2	30.
Blue Mtn. Spgs. Plw.(M) Boulder Creek *	4/29	2	24.4		9.05	Bald Mountain (OR) * Beaver Reservoir (Rev.)	4/26 4/29	84 32	36.1	14.8	23.
Buck Pasture * Buckskin, Lower (Nev.)		9				Beaver Res. Pillow (T) Beaver Res. Pillow (S) Beaver Res. Pillow (M)	4/29 4/29 N/R	20	5.7	0.0	
Buckskin, Upper (Nev.) Bull Basin (Ida.) * Bully Creek *		0 0			,	Big Sheep * Blue Mtn. Summit	4/26 4/29	93	40.9	17.6	23
Call Meadows * Columbia Basin (Nev.)		9 9				Bourne Bourne Pillow (T)	4/29 4/29	30	12.8	0.0	7
Disaster Peak (Nev.) Eldorado Pass	4/30	0	0.0	0.0		Bourne Pillow (S) Bourne Pillow (M)	4/29	47	20.0	3.5 5.7	-
Fawn Creek (Nev.) Fish Creek *	4/27 DISCON	48 NTINUED	20.9	8.3		County Line (Rev.) County Line Pillow (T)	4/29	0 0	0.0	0.0	0
Fish Creek Fish Creek (Rev.) Fish Creek Pillow (T)	5/2	8	19.2	14.3		County Line Pillow (S) County Line Pillow (M) Dooley Mountain	4/29 4/29 4/30	16	0.1	0.0	-
Fish Creek Pillow (S) Fish Creek Pillow (M)	3/2	0 2	13.2	14.5		Eilertson Meadows Eilertson Meadows Plw.(T)	4/29 4/30	28	11.7	0.0	4
Flag Prairie * Fox Creek (Nev.)		e				Eilertson Meadows Plw.(S) Eilertson Meadows Plw.(M)	4/29 4/29	22	9.1 9.8	0.0	-
Fry Canyon (Nev.) Gold Creek (Nev.)	4/27 4/29	12	4.9	0.0	1.5	Eldorado Pass Gold Center	4/30 4/29	20	8.5	0.0	4
Government Corrals Granite Peak (Nev.)		2				Gold Center Pillow (T) Gold Center Pillow (S) Gold Center Pillow (M)	4/30 4/29 4/29	6	3.2 2.8 3.4	0.0	-
Hyde Pasture (Ida.) * Jack Creek, Lower (Nev.) Jack Creek, Upper (Nev.)	4/27	0	0.0	0.0	1.4a 4.7a		4/29	e 46	17.4	2.9	14
Jacks Peak (Nev.) Johnston Pond (Ida.) *	4/27	95	39.4		26.8	Little Antone (Alt.) Lucky Strike	4/29 4/29	11 37	4.7	0.0	7
Lake Creek R.S. Plw. (T)	4/28 4/28	14	6.8	0.0	3.43	Lucky Strike Pillow (T) Lucky Strike Pillow (S)	4/29	17	9.8	0.0	-
Lake Creek R.S. Plw. (S) Lake Creek R.S. Plw. (M)	4/28	19	8.5 8.2 5.6	0.0	1 6:	Lucky Strike Pillow (M) Mirror Lake *	4/29 4/26 4/26	238 80	9.0 95.2 35.0	0.0 42.2 12.2	74 24
Laurel Draw (Nev.) * Lookout Butte * Louse Canyon *	4/27	13	0.0	0.0	1.65	Moss Spring Moss Spring Pillow (T) Moss Spring Pillow (S)	N/R 4/26	75	30.8	13.8	-
Martin Creek (Nev.) Merritt Mountain (Nev.) *		0 0				Moss Spring Pillow (M) Mt. Howard Pillow (T)	N/R N/R			9.7	-
Midas (Nev.) * Mud Flat (Ida.)		e e				Mt. Howard Pillow (S) Mt. Howard Pillow (M)	4/26 N/R	73	29.0		2
Oregon Canyon * Quinn Ridge (Nev.) *		8				Schneider Meadow Schneider Meadow Plw. (T) Schneider Meadow Plw. (S)	4/26 N/R 4/26	84 79	41.2	17.4	26
Red Canyon (Ida.) * Rock Springs Rock Spgs. Plw. (T)	4/28	0	0.0		0.6	Schneider Meadow Plw. (M) Standley *	N/R 4/26	102	41.8	23.0	35
Rock Spgs. Plw. (S) Rock Spgs. Plw. (M)	4/28	0	0.0	0.0	1 1	Taylor Green Taylor Green Pillow (T)	4/26 N/R	53	23.4	5.8	13
Rodeo Flat (Nev.) 76 Creek (Nev.) *	4/27	7 36	2.9		1 - 1		4/26 N/R	63	27.5	8.8	-
Silver City (Ida.) Silver City (Ida.) *	DISCO	2 2	1			Tipton Tipton Pillow (T) Tipton Pillow (S)	4/29 N/R 4/29	37	13.8	3.0	-
Silvies * Silvies Silvies Pillow (T)	N/R	NTINUE		2.0		Tipton Pillow (M) TV Ridge *	N/R 4/26	78	32.0	3.2	23
Silvies Pillow (S) Silvies Pillow (M)		e e				West Eagle Meadows * Wolf Creek Pillow (T)	4/26 N/R	92	40.5		-
South Mountain #2 (Ida.) South Mtn. #2 Plw. (T)	4/29 N/R	36	16.0	0.0	1 7	Wolf Creek Pillow (S) Wolf Creek Pillow (M)	4/29	46	18.9	5.9	-
Stag Mountain (Nev.) * Stinking Water	5/1	0	0.0	0.0							
Succor Creek (Ida.) * Taylor Canyon (Nev.)	4/27	0	0.0	0.0	0.5						
Toe Jam (Nev.) * Tremewan Ranch (Nev.) * Trout Creek *		0 0									
"V" Lake * Vaught Ranch (Ida.) *		0 0									
War Eagle (Ida.) *		e		1062		the state of the s			())	J.,,	,

SNOW		HIS YEAR		PAST R		SNOW		HIS YEA		PAST RI	
DRAINAGE BASIN and/or SNOW COURSE	Date of Survey	Snow Depth (In.)	Water Cont. (in.)	(Inch	es)	DRAINAGE BASIN and/or SNOW COURSE	Date of Survey	Snaw Depth (In.)	Water Cant. (In.)	Woter C (Inch Last Yr.	es)
UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS AREA 3 Arbuckle Mountain Plw.(T) Arbuckle Mountain Plw.(S) Arbuckle Mountain Plw.(M) Blue Mountain Camp Bowman Springs Plw. (T) Bowman Springs Plw. (T) Bowman Springs Plw. (M) Butte Creek Summit Emigrant Springs Plw. (T) Emigrant Springs Plw.(S) Emigrant Springs Plw.(M) High Ridge Pillow (T) High Ridge Pillow (T) High Ridge Pillow (M) Lucky Strike Pillow (S) Lucky Strike Pillow (S) Lucky Strike Pillow (M) Madison Butte Pillow (M) Madison Butte Pillow (M) Madison Butte Pillow (M) Madison Butte Pillow (M) Matison Butte Pillow (M) Blue Mountain Springs Blue Mtn. Spgs. Plw.(T) Blue Mtn. Spgs. Plw.(T) Blue Mtn. Spgs. Plw.(S) Blue Mtn. Spgs. Plw.(M) Blue Mountain Summit Butte Creek Summit Derr Pillow (T) Derr Pillow (S) Derr Pillow (M) Gold Center Plw. (S) Lucky Strike Plw.(T) Lucky Strike Plw.(T) Lucky Strike Plw.(T) Choco Meadows Plw.(T) Ochoco Meadows Plw.(T) Ochoco Meadows Plw.(T) Ochoco Meadows Plw.(S) Snow Mtn. Plw. (S) Snow Mtn. Plw. (M) Starr Ridge Plw. (T) Starr Ridge Plw. (S) Starr Ridge Plw. (S) Starr Ridge Plw. (S) Starr Ridge Plw. (S) Tipton Pillow (M)	4/29 N/R 4/29 N/R 4/29 4/29 4/29 4/29 4/29 4/29 4/29 N/R N/R 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	11 64 14 6 0 74 77 0 82 11 64 46 50 8 20 6 14 37 7 0 e e e e e e 4 0 8 37	5.1 24.4 6.6 4.7 3.1 3.8 0.0 0.2 0.0 0.1 36.4 40.0 14.0 9.8 7.6 9.0 0.0 40.8 5.1 24.4 23.5 24.4 7.7 12.9 8.5 3.2 2.8 3.4 7.6 9.0 0.0 14.0 9.8 7.6 9.0 0.0 14.0 9.8 7.6 9.0 14.0 9.0 14.0 14.0 9.0 14.0 1	0.0 0.0 2.4 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	11.1 6.8 ^b 9.0 ^b 1.8 ^b 2.4 7.8 0.1	UPPER DESCHUTES, CROOKED WATERSHEDS AREA 5 Bald Peter Beaver Creek Caldwell Ranch Cascade Summit Plw. (T) Cascade Summit Plw. (S) Cascade Summit Plw. (M) Chemult Alternate Chemult Alt. Plw. (S) Chemult Alt. Plw. (M) Derr Derr Pillow (T) Derr Pillow (S) Derr Pillow (S) Derr Pillow (S) Derr Pillow (S) Hogg Pass Pillow (T) Hogg Pass Pillow (S) Hogg Pass Pillow (M) Hungry Flat Irish-Taylor Pillow (M) Lionshead* Marks Creek New Crescent Lake New Crescent Lake Plw. (T) New Crescent Lake Plw. (S) New Crescent Lake Plw. (M) New Dutchman Flat #2 Ochoco Meadows Ochoco Meadows Plw. (S) Ochoco Meadows Plw. (S) Ochoco Meadows Plw. (S) Snow Mountain Snow Mountain Plw. (S) Snow Mountain Plw. (S) Snow Mountain Plw. (M) Summit Lake Pillow (M) Tamarack Tangent Three Creek Mdw. Plw. (S) Three Creek Mdw. Plw. (M) Whitewater Meadow *	4/30 N/R 4/29 N/R 4/29 5/3 N/R 5/3 5/2 4/30 N/R 4/29 4/29 4/29 4/29 4/29 4/28 N/R 4/28 N/R 4/28 4/28 4/28 N/R 4/28 4/28 4/28 4/28 4/28 4/28 4/28 4/28	110 e 82 98 1 0 e 109 112 0 115 45 0 29 145 e e 127 e 56 19 52 73 0	51.4 36.5 43.2 44.0 0.2 0.0 12.9 51.1 51.2 0.0 52.2 51.5 52.1 19.8 0.0 13.6 9.8 9.6 10.3 73.6	11.0 0.0 0.0 0.0 0.0 0.0 12.5 15.2 15.1 15.1 0.0 0.0 0.0 0.0 0.1 0.0 0.0 21.9 0.0 21.9	14. 2. 13.

SNOW
DRAINAGE BASIN and/or SNOW COURSE
HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS AREA 6 Brooks Meadow Clear Lake Clear Lake Pillow (T) Clear Lake Pillow (S) Clear Lake Pillow (M) Clear Lake Expt. Greenpoint Greenpoint Pillow (S) Greenpoint Pillow (M) Mt. Hood Test Site (T) Mt. Hood Test Site (S) Mt. Hood Test Site (M) Mud Ridge Pillow (T) Red Hill Pillow (S) Red Hill Pillow (S) Red Hill Pillow (S) Red Hill Pillow (M) Still Creek Switchback Tilly Jane LOWER COLUMBIA WATERSHED AREA 7 Blazed Alder Pillow (M) Mt. Hood Test Site (S) Mt. Hood Test Site (T) Mt. Hood Test Site (S) Mt. Hood Test Site (T) Mt. Hood Test Site (S) North Fork Res. (T) North Fork Res. (T) North Fork Res. (S) North Fork Res. (M) Still Creek WILLAMETTE WATERSHEDS AREA 8 Cascade Summit Cascade Summit Plw. (T) Cascade Summit Plw. (M) Champion Clackamas Lake Plw. (T) Clackamas Lake Plw. (S) Clackamas Lake Plw. (M) Clear Lake Plw. (S) Clackamas Lake Plw. (M) Clear Lake Plw. (S) Clear Lake Plw. (M) Clear Lake Expt.

BASIC DATA SUPPLEMENT 1 MAY 1, 1982

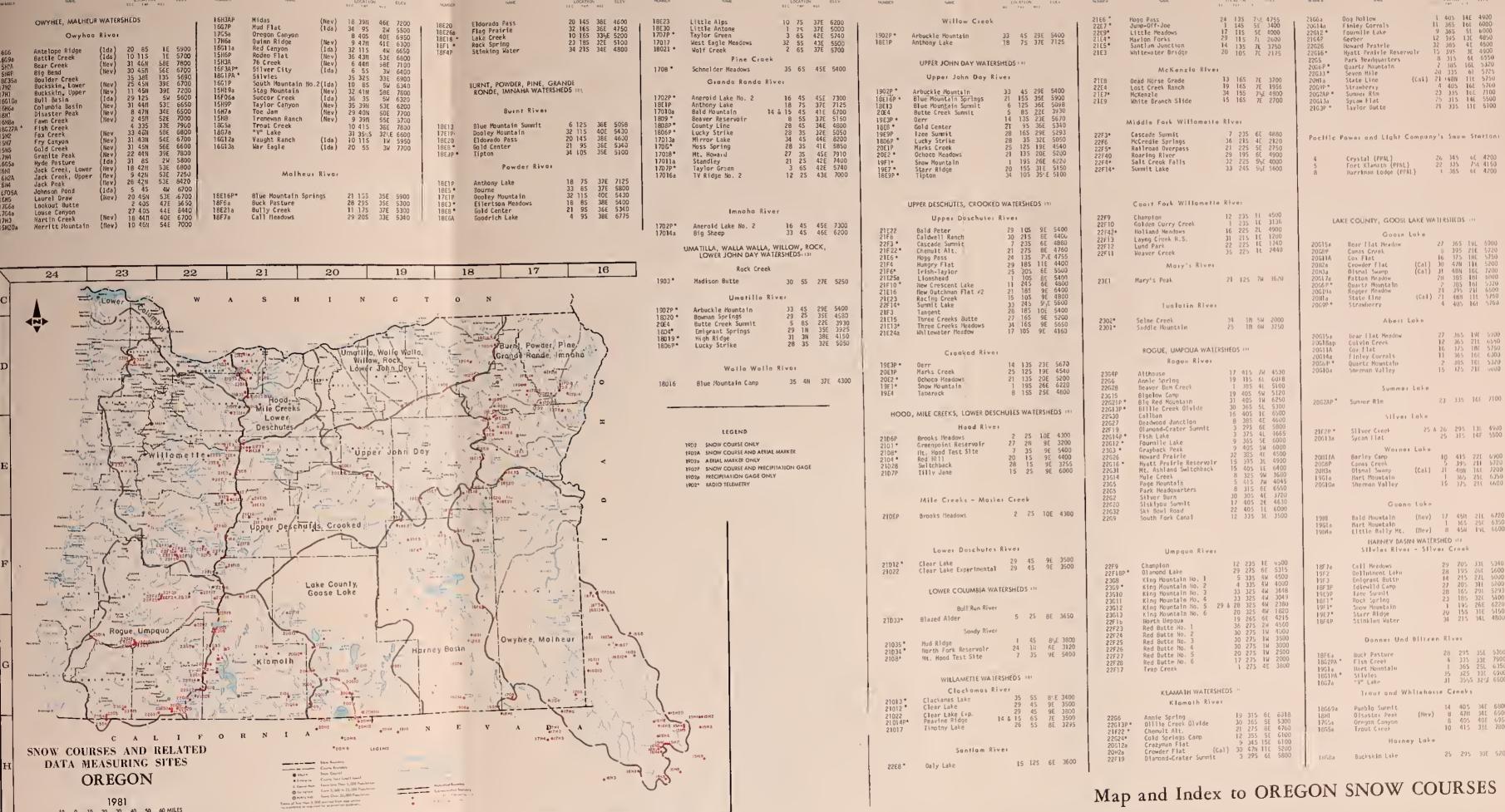
SNOW	Т	HIS YEAR	-	PAST R	ECORD	SNOW	Т	HIS YEA	R	PAST R	ECORD
DRAINAGE BASIN ond/or SNOW COURSE	Date of	Snow Depth	Woter Cont.	Woter (es)	DRAINAGE BASIN ond/or SNOW COURSE	Dote of	Snow Depth	Woter Cont.	Woter C	nes)
DIATIVAGE BASIN OND/ OF SINOW COUNTE	Survey	(ln.)	(ln.)	Lost Yr.	Ave. C	DIAMAGE BASIN GIIG/GI SINON COOKSE	Survey	(ln.)	(In.)	Last Yr.	Ave. C
ROGUE, UMPQUA WATERSHEDS AREA 9						KLAMATH WATERSHEDS AREA 10					
ROGUE, UMPQUA WATERSHEDS AREA 9 Althouse #2 Althouse #3 Annie Spring Beaver Dam Creek Bigelow Camp Plw. (T) Bigelow Camp Plw. (S) Bigelow Camp Plw. (M) Big Red Mountain Big Red Mtn. Plw. (T) Big Red Mtn. Plw. (S) Big Red Mtn. Plw. (M) Billie Creek Divide Billie Creek Div.Plw. (S) Billie Creek Div.Plw. (S) Billie Creek Div.Plw. (M) Caliban Caliban (Alternate) Champion Cold Springs Camp Cold Spgs. Camp Plw. (M) Deadwood Junction Diamond-Crater Summit Diamond Lake Diamond Lake Plw. (T) Diamond Lake Plw. (S) Diamond Lake Plw. (S) Diamond Lake Plw. (M) Fish Lake Fish Lake Pillow (T) Fish Lake Pillow (S) Fish Lake Pillow (S) Fourmile Lake Pillow (S) Fourmile Lake Pillow (S) Fourmile Lake Pillow (M) Grayback Peak Howard Prairie Pillow (S) Fourmile Lake Pillow (M) Grayback Peak Howard Prairie Pillow (S) Hyatt Prairie Pillow (M) King Mountain #2 King Mountain #2 King Mountain #2 King Mountain #3 King Mountain #4 King Mountain #5 King Mountain #6 Mt. Ashland Switchback Mule Creek North Umpqua Page Mountain Park Headquarters Red Butte #1 Red Butte #1 Red Butte #2 Red Butte #3 Red Butte #4	5/1 4/30 5/3 5/2 4/28 4/28 4/28 4/28 4/28 4/25 4/30 4/25 4/30 4/29 N/R 4/29 N/R 4/29 N/R 4/29 N/R 4/28 4/28 4/28 4/20 4/27 4/27 4/27 4/27 4/27 4/27 4/27 4/27	131 0 e e e e e 45 46 108 70 101 72 0 96 52 36 22 11 61 83 0 TR 0 0 0 105 15 19 e 173 23 20 0 0	(In.) 60.6 0.0 15.4 31.8 21.0 21.2 22.0 19.9 46.2 33.1 45.0 34.8 37.1 0.0 43.2 22.4 16.5 9.3 5.5 28.1 37.5 35.3 34.7 0.0 0.1 0.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	7.4 7.2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	45.8 7.62 14.3 30.6 35.72 30.52 3.12 30.7 18.2 7.92 21.92 21.92 21.92 37.13 2.82 7.3 63.7 13.8 5.5 1.0 37.13	KLAMATH WATERSHEDS		131 45 46 1 0 27 e e 6 4 28 e 61 83 e e 4 TR 0 173 0 0 173 0 0 173 0 0 173 0 0 173 0 0 0 173 0 0 0 173 0 0 0 173 0 0 0 173 0 0 0 173 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(In.) 60.6 21.0 21.2 22.0 19.9 0.2 0.0 45.0 34.8 37.1 13.0 43.2 13.4 28.1 37.5 35.3 34.7 0.0 0.1 0.0 0.1 0.0 0.1 0.1 0.1 0.2 0.0 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	45.8 14.3
Red Butte #5 Red Butte #6 Seven Mile Seven Mile Pillow (T) Seven Mile Pillow (S)	4/26 4/26 4/26 5/3	0 0 e 	0.0	0.0							
Seven Mile Pillow (M) Silver Burn Siskiyou Summit Ski Bowl Road South Fork Canal Trap Creek	5/3 4/27 4/26 5/3 4/30	0 0 76 0 17	0.0 0.0 31.6 0.0 8.3	0.0 5.8 0.0	26.0½						

WONS		HIS YEAR		PAST R		SNOW	T	HIS YEA	?	PAST RE	
DRAINAGE BASIN and/or SNOW COURSE	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water ((Inch Last Yr.	es)	DRAINAGE BASIN ond/or SNOW COURSE	Date of Survey	Snow Depth (In.)	Woter Cant. (In.)	Woter Co (Inch Last Yr.	es)
LAKE COUNTY, GOOSE LAKE WATERSHEDS AREA 11 Adin Mountain (Calif.) Bald Mountain (Nev.) Barley Camp * Bear Flat Meadow * Camas Creek #1 Camas Creek #2 Cedar Pass (Calif.) Colvin Creek * Crowder Flat (Calif.) * Dismal Swamp (Calif.) * Dismal Swamp #2 Plw.(T) Dismal Swamp #2 Plw.(S) Dismal Swamp #2 Plw.(M) Finley Corrals * Hart Mountain * Little Bally Mtn. (Nev.) Mt. Bidwell (Calif.) North Star (Calif.) Patton Meadows * Quartz Mountain Plw.(T) Quartz Mountain Plw.(S) Quartz Mountain Plw.(S) Quartz Mountain Plw.(M) Reservation Creek (Calif.) Rogger Meadows * Sherman Valley * Silver Creek Plw.(T) Silver Creek Plw.(S) Silver Creek Plw.(M) State Line (Calif.) * Strawberry Strawberry Plw. (S) Strawberry Plw. (S) Strawberry Plw. (S) Strawberry Plw. (S) Summer Rim * Summer Rim Plw.(S) Summer Rim Plw.(S) Summer Rim Plw.(S) Summer Rim Plw.(M) Sycan Flat *	4/28 4/27 4/30 4/26 4/26 4/27 4/27 4/27 4/27 4/27 4/27 4/27 4/27 4/27 4/27 4/27	25 e e 10 18 e e e e e e 51 0 e e e e e 4 - TR - 50 e e e e	11.1 4.7 8.2 31.6 13.4 24.5 0.0 0.3 0.0 0.0 4.0	0.0	 14.5 <i>b</i>	HARNEY BASIN WATERSHEDS AREA 12 Blue Mountain Springs Blue Mtn. Spgs. Plw.(T) Blue Mtn. Spgs. Plw.(S) Blue Mtn. Spgs. Plw.(M) Buck Pasture * Buckskin Lake * Call Meadows * Delintment Lake Denio Creek * Disaster Peak (Nev.) Emigrant Butte Fish Creek (Rev.) Fish Creek Plw.(T) Fish Creek Plw.(S) Fish Creek Plw.(M) Government Corrals Hart Mountain * Idlewild Camp Alt. Izee Summit Lake Creek R.S. Plw.(T) Lake Creek R.S. Plw.(M) Oregon Canyon * Pueblo Summit * Rock Springs Rock Springs Plw.(T) Rock Springs Plw.(S) Rock Springs Plw.(S) Rock Springs Plw.(S) Rock Springs Plw.(S) Silvies * Silvies Pillow (T) Silvies Pillow (S) Silvies Pillow (M) Snow Mountain Plw.(T) Snow Mountain Plw.(S) Snow Mountain Plw.(M) Starr Ridge Starr Ridge Pillow (T) Starr Ridge Pillow (M) Stinking Water Trout Creek * "V" Lake *	5/2 5/2 5/1 4/28 4/28 4/28 4/28 4/28 4/28 4/28 4/28	46 50 e e e e e e e e e e e e e e e e e e	0.0 7.0 6.8 8.7 8.5 8.2	0.1 14.3 0.0 0.0 0.0 0.0 0.0 2.0	1.
						* Aerial N/R No Report TR Trace T = Telemetry Measurement S = Snow Tube Measurement M = Manometer Measurement					

760 From To	Date of Reading Om 3/30 4/26 Om 4/5 4/29 Om 3/28 4/29 Om 4/1 4/29 Om 2/23 4/29 Om 3/29 Om 3/29	Precipitation 10.80" 2.50" 0.96" 2.64" 2.24" 9.00"	Last Year	Average
50 From To	4/26 om 4/5 4/29 om 3/28 4/29 om 4/1 4/29 om 2/23 4/29 om 3/29 om 3/29 om 4/1 5/3	2.50" 0.96" 2.64" 2.24" 9.00"		
50 From To 50 From To 50 From To 500 F	4/29 om 3/28 4/29 om 4/1 4/29 om 2/23 4/29 om 3/29 om 3/29 om 4/1 5/3	0.96" 2.64" 2.24" 9.00"		
300 From To 380 From To 380 From To 360 From To	4/29 rom 4/1 4/29 rom 2/23 4/29 rom 3/29 4/29 rom 4/1 5/3	2.64" 2.24" 9.00"		
760 From To	om 2/23 4/29 om 3/29 om 3/29 om 4/1 5/3	2.24" 9.00"		
760 Fr To 500 Fr To	om 3/29 om 3/29 om 4/1 o 5/3	9.00"		
760 Fr To 500 Fr To	o 4/29 com 4/1 o 5/3			
500 Fr To 100 Fr	5/3	3.00"		
To 100 Fr	rom 2/24			
	4/29	7.20"		
	rom 3/29 4/28	6.00"		
	rom 2/23 0 4/29	11.52"		
	com 4/5 0 4/29	1.68"		
	rom 3/30 0 4/28	4.56"		
	com 4/1 0 4/29	2.76"		
	rom 4/1 5/3	4.80"		
		3.12"		
		7.80"		
		18.84"		
		2.16"		
		1.87"		
	•	1.56"		
1		10.92"		
	900 Fr To 500 Fr To 400 Fr To 120 Fr To 250 Fr To	To 5/3 From 3/31 To 4/30 From 3/31 To 4/29 From 2/24 To 4/30 From 3/31 To 4/28 From 4/5 To 4/29 From 4/5 To 4/29 From 4/5 To 4/29	To 5/3 From 3/31 To 4/30 From 3/31 To 4/29 7.80" To 4/29 400 From 2/24 To 4/30 120 From 3/31 To 4/28 500 From 4/5 To 4/29 250 From 4/5 To 4/29 10.92"	To 5/3 From 3/31 To 4/30 From 3/31 To 4/29 7.80"

PRECIPITATION (Inches)		CURRENT INF	ORMATION	PAST RECORD		
DRAINAGE BASIN and PRECIPITATION GAGE LOCATION	ELEVATION	Date of Reading	Precip- itation	Last Year	Average	
Moss Springs (Union County)	5850	From 3/26 To 4/26	4.80"			
Mt. Hood Test Site (Clackamas County)	5400	From 2/23 To 4/29	17.12"			
Mt. Howard (Wallowa County)	7910	From 3/26 To 4/26	7.68"			
Mud Ridge (Clackamas County)	4050	From 3/31 To 4/29	6.00"			
Peavine Ridge (Clackamas County)	3500	From 3/30 To 4/26	6.96"			
Quartz Mountain (Lake County)	6300	From 3/30 To 4/27	4.62"			
Schneider Meadows (Baker County)	5400	From 4/8 To 4/26	0.12"			
Starr Ridge (Grant County)	5156	From 3/31 To 4/28	1.80"			
Strawberry (Lake County)	5760	From 2/23 To 4/27	7.20"			
Summit Lake (Klamath County)	5600	From 3/30 To 4/28	9.24"			
Taylor Green (Baker County)	5740	From 3/26 To 4/26	4.20"			
Three Creek Meadows (Deschutes County)	5650	From 3/29 To 4/27	7.44"			
Tipton (Baker County)	5100	From 4/1 To 4/29	2.88"			
Wolf Creek (Union County)	5720	From 1/27 To 4/29	6.60"			
					d d	







The Following Organizations Cooperate in the Oregon Snow Survey Work

STATE

Idaho Cooperative Snow Surveys
Nevada Cooperative Snow Surveys
Oregon State University
Oregon Department of Water Resources
Soil and Water Conservation Districts of Oregon
COUNTY

Douglas County Water Resources Survey FEDERAL

Department of Agriculture Cooperative Extension Service Forest Service Soil Conservation Service

Department of Army
Corps of Engineers
Department of Commerce

NOAA, National Weather Service

Department of Energy

Bonneville Power Administration

Department of the Interior

Bureau of Land Management

Fish and Wildlife Service

Geological Survey

Bureau of Reclamation

PUBLIC UTILITIES

Pacific Power and Light Company Portland General Electric Company California-Pacific National

MUNICIPALITIES

City of Baker
City of La Grande
City of Portland
City of The Dalles
City of Walla Walla
IRRIGATION DISTRICTS

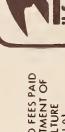
Armold Irrigation District Associated Ditch Companies Burnt River Irrigation District Central Oregon Irrigation District East Fork Irrigation District Grants Pass Irrigation District Hood River Irrigation District Jordan Valley Irrigation District Juniper Flat Irrigation District Lakeview Water Users, Incorporated Medford Irrigation District Middle Fork Irrigation District North Board of Control - Owyhee Project Ochoco Irrigation District Rogue River Valley Irrigation District South Board of Control - Owyhee Project Squaw Creek Irrigation District Talent Irrigation District Tumalo Project Vale - Oregon Irrigation District Varmsprings Irrigation District PRIVATE ORGANIZATIONS

The Crag Rats, Hood River, Oregon

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